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E2

31. (Amended) The method of claim 30, wherein said cancer is a Ewing tumor.

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E3

32. (Twice Amended) A kit for identifying DNA sequences of fusion genes, said fusion genes comprising a target gene and a fusion partner, said kit comprising: one pair of primers wherein one of the primers of the pair is complementary to the nucleotide sequence of the target gene and binds to said target gene to form a complex which provides indiscriminate amplification, in the presence of Taq polymerase, and the other primer is an anchored primer; and at least one probe specific for said fusion partner, said at least one probe being bound to a solid support.

E4

33. (Amended) A kit according to claim 32, further comprising at least one agent capable of cleaving or blocking the gene of the polypeptidic nucleic acids or of the ribozymes.

E5

36. (Amended) A kit according to claim 32, wherein said at least one probe is bound to the solid support through a biotin group bonded to streptavidine coupled to said support.

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37. (Amended) A kit according to claim 32, wherein the solid support is a miniaturized support.

38. (Amended) A kit according to claim 32 wherein the support is a DNA chip.

39. (Twice Amended) An *in vitro* diagnostic method for detecting and identifying DNA sequences of fusion genes comprising a target gene and a fusion partner, said fusion genes being involved in cancer associated with rearrangements of the target gene, wherein a patient DNA or cDNA is subjected to an anchored PCR comprising:

a) indiscriminately amplifying all of the DNA or cDNA of said fusion genes by PCR, with one pair of primers, one of the primers being complementary to the nucleotide sequence of the target gene, the other primer being an anchored primer, wherein all the DNA or cDNA sequences of the target gene are amplified,

b) obtaining PCR products,

c) hybridizing the PCR products with probes specific for said fusion partner,

d) detecting rearrangements of the target gene, and identifying the fusion genes of any detected rearrangements.

REMARKS

Reconsideration is requested.

The Examiner interview of January 29, 2003, is acknowledged, with appreciation.

The Interview Summary is an accurate reflection of the issues discussed.

Claims 22, 23, 34 and 35 have been canceled, without prejudice. Claims 17-21, 24-33 and 36-39 are pending.

A formal version of the one sheet of drawing is attached and acceptance of the same is requested in the Examiner's next communication.